



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,641	07/26/1999	LUIS FELIPE CABRERA	2130	5763

7590

02/26/2002

ALBERT S MICHALIK
MICHALIK & WYLIE PLLC
14645 BEL-RED ROAD
SUITE 103
BELLEVUE, WA 98007

EXAMINER

LE, DIEU MINH T

ART UNIT

PAPER NUMBER-

2184

DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/361,641

Applicant(s)

CABRERA et al.

Examiner

DIEU-MINH LE

Group Art Unit

2184

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE THREE(3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10/18/99
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-48 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-48 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☒ Notice of References Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2184

Part III DETAILED ACTION

Specification

1. Claims 1-48 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

Art Unit: 2184

examiner to consider the applicability of 35 U.S.C. 103[©] and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGill, III et al. (US Patent 5,469,573 hereafter referred to as McGill) in view of Hugard et al. (US Patent 5,574,669 hereafter referred to as Hugard).

As per claim 1:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- writing information/data to a medium [fig. 3, col. 2, lines 21-22];
- collecting information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- reading information from a medium to a restoration environment [col. 2, lines 23-26];
- launching a restore program (i.e., enabling the operation of the backup device) [col. 2, lines 26-28] and (i.e.,

Art Unit: 2184

operation the backup device to restore the data files) [col. 2, lines 28-31].

McGill does not explicitly teach:

- system state information and registry state.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];

Art Unit: 2184

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].

- a checkpoint routine used for system recovery process [col. 5, lines 47-60].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39], loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the system state information and registry information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can

Art Unit: 2184

modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by

Art Unit: 2184

utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claims 2-4:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58].

Art Unit: 2184

McGill does not explicitly teach:

- API call via state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- user application interface including video display adapter, communication, software device drivers [col. 4, lines 1-13];
- recovery application program [col. 4, lines 32-38].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- detecting application files for recovery [col. 4, lines 32-47];
- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67];

Art Unit: 2184

- a checkpoint routine used for system recovery process [col. 5, lines 47-60];
- selected application files for recovery [col. 4, lines 32-47].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically a user application interface including video display adapter, communication, software device drivers [col. 4, lines 1-13] and recovery application program [col. 4, lines 32-38] as being the API call via state information as claimed by Applicant since the system state's API or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly

Art Unit: 2184

including detecting application files for recovery [col. 4, lines 32-47], a checkpoint routine used for system recovery process [col. 5, lines 47-60]; and selected application files for recovery [col. 4, lines 32-47] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein.

As per claims 5-11:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:

Art Unit: 2184

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- partitioning data of the hard disks [col. 6, lines 1-9 and col. 7, lines 13-24];
- launching a restore program (i.e., enabling the operation of the backup device) [col. 2, lines 26-28] and (i.e., operation the backup device to restore the data files) [col. 2, lines 28-31].
- a **hard drive medium** [col. 2, lines 58-59];
- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].
- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

Art Unit: 2184

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- **a data text format and field** [col. 6, lines 49-65].

As per claim 12:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
 - **a floppy disk medium** [col. 2, lines 40-42].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- **a floppy disk medium** [col. 3, lines 37-45].

Art Unit: 2184

As per claim 13:

Even though McGill does not explicitly teach:

- a CD-ROM medium.

However, McGill discloses capabilities of:

- a removable media [col. 2, lines 40-42];
- an **optical disk drive medium** [col. 3, line 60].

Therefore, it would have been obvious to an ordinary skill in the art to realize the McGill's removable and optical disk drive medium as being the CD-ROM medium. This is because the optical disk drive's data is stored in a CD-ROM type medium and is read by optical light function. In addition, the CD-ROM feature is notoriously well known and widely used in computer arena. Generally speaking, every computer now-a-day has either external or internal CD-ROM capability therein.

As per claims 14-15:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:

Art Unit: 2184

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- **transmitting data over transmission medium** [fig. 1, col. 4, lines 1-5];
- **saving information to network files** [col. 6, lines 35-50].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];
- comprising:

- saving computer configuration data capability [col. 7, lines 29-35].

As per claims 16-19:

McGill substantially teaches the invention. McGill teaches:

- a method for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other

Art Unit: 2184

files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- a **hard drive medium** [col. 2, lines 58-59];

- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].

- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

with a restoration comprising:

- a **hard drive medium** [col. 4, lines 1-5];

- a computer system boot from hard disk for recovery [col. 4, lines 48-60].

As per claims 20-24:

These claims are the same as per claims 1-19. The only minor different is that these claims are directed to a **computer-readable medium** instead of the method for recovering from a failure of a computer system as described in claims 1-19.

However, it would have been obvious to one having ordinary skill

Art Unit: 2184

in the art at the time the invention was made to realized that a **computer-readable medium** is a necessary item for such a recovery a computer system, more specifically, a computer failure computer system. Since the computer obviously needs a means for instruction or code means resided within the computer-readable medium for performing the data storing, receiving, transmitting operation. Therefore, this claim is also rejected under the same rationale applied against claims 1-19.

As per claim 25:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- collecting information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- recording (i.e., writing) data files a accessible medium [fig. 3, col. 2, lines 22-23];
- recording recovery information to the medium [col. 2, lines 23-31];

McGill does not explicitly teach:

Art Unit: 2184

- registry information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];
- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- a checkpoint routine used for system recovery process [col. 5, lines 47-60];

Art Unit: 2184

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39], loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the system registry information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS,

Art Unit: 2184

SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility

Art Unit: 2184

environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claim 26:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58].

McGill does not explicitly teach:

- API call via state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other

Art Unit: 2184

files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- user application interface including video display adapter, communication, software device drivers [col. 4, lines 1-13];
- recovery application program [col. 4, lines 32-38].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- detecting application files for recovery [col. 4, lines 32-47];
- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- a checkpoint routine used for system recovery process [col. 5, lines 47-60];
- selected application files for recovery [col. 4, lines 32-47].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made

Art Unit: 2184

first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc., and more specifically a user application interface including video display adapter, communication, software device drivers [col. 4, lines 1-13] and recovery application program [col. 4, lines 32-38] as being the API call via state information as claimed by Applicant since the system state's API or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..to explicitly including detecting application files for recovery [col. 4, lines 32-47], a checkpoint routine used for system recovery process [col. 5, lines 47-60]; and selected application files for recovery [col. 4, lines 32-47] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for

Art Unit: 2184

data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein.

As per claims 27-33:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
 - partitioning data of the hard disks [col. 6, lines 1-9 and col. 7, lines 13-24];
 - launching a restore program (i.e., enabling the operation of the backup device) [col. 2, lines 26-28] and (i.e.,

Art Unit: 2184

operation the backup device to restore the data files) [col. 2, lines 28-31].

- a hard drive medium [col. 2, lines 58-59];

- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].

- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- computer configuration changes [col. 15, lines 20-40].

As per claim 34:

McGill substantially teaches the invention. McGill teaches:

- a method for restoring of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:

Art Unit: 2184

- cataloging information/data including restore program [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- reading restore information [col. 2, lines 23-26];
- launching a restore program (i.e., enabling the operation of the backup device) [col. 2, lines 26-28] and (i.e., operation the backup device to restore the data files) [col. 2, lines 28-31];
- restore computer system, restoring recovery information [col. 2, lines 23-31];
- configuring computer device with information [col. 2, lines 23-31] (i.e., data information executing including operating system files, system configuration files, device driver files [col. 3, lines 51-58]).

McGill does not explicitly teach:

- system registry information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

Art Unit: 2184

- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];
- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].
- a checkpoint routine used for system recovery process [col. 5, lines 47-60];

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system

Art Unit: 2184

files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39], loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the system registry information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison

Art Unit: 2184

for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data

Art Unit: 2184

backup and restoration via computer system state information or computer data configuration.

As per claims 35-37 and 42-43:

McGill substantially teaches the invention. McGill teaches:

- a method for restoring of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
 - partitioning data of the hard disks [col. 6, lines 1-9 and col. 7, lines 13-24];
 - launching a restore program (i.e., enabling the operation of the backup device) [col. 2, lines 26-28] and (i.e., operation the backup device to restore the data files) [col. 2, lines 28-31].
- a **hard drive medium** [col. 2, lines 58-59];
- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].
- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

Art Unit: 2184

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system

[abstract, col. 1, lines 10-18];

comprising:

- configuration files and recovery tool files including

*.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].

- **hard disk information scanning** [col. 2, lines 1-24].

As per claims 38-41:

McGill substantially teaches the invention. McGill teaches:

- a method for restoring of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- a **hard drive medium** [col. 2, lines 58-59];

- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].

Art Unit: 2184

- restoring including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5]
- install **device driver** for restoration [col. 2, lines 43-47];
- identifying a **restore program** [fig. 2, col. 4, lines 30-37].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc.. [col. 12, lines 41-67].

As per claim 44:

McGill substantially teaches the invention. McGill teaches:

- a system for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - a medium [fig. 2, col. 3, lines 58-65];

Art Unit: 2184

- a backup process, collecting information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- recording (i.e., writing) data files a accessible medium [fig. 3, col. 2, lines 22-23];
- a restore process, restoring recovery information to the medium [col. 2, lines 23-31];
- configuring computer device with information [col. 2, lines 23-31] (i.e., data information executing including operating system files, system configuration files, device driver files [col. 3, lines 51-58]).

McGill does not explicitly teach:

- system state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58].

In addition, Hugard explicitly teaches:

Art Unit: 2184

- a backup and restoring data configuration system

[abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15]

including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];

- configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39] as being the system state information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system

Art Unit: 2184

crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including *.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error

Art Unit: 2184

free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claims 45-48:

McGill substantially teaches the invention. McGill teaches:

- a system for recovering from a failure of a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
 - data information including operating system files, system configuration files, device driver files, and any other

Art Unit: 2184

files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- writing **device driver** to the medium [col. 2, lines 43-47];
- identifying a **restore program** [fig. 2, col. 4, lines 30-37];
- writing **hard disk configuration information** [col. 2, lines 45-60];
- storing information/data of first system on another medium [fig. 3, col. 2, lines 21-22];
- storing data files via the backup device to a second medium from other medium [fig. 3, col. 2, lines 22-23];
- enabling the operation of the backup device [col. 2, lines 26-28];
- operation the backup device to restore the data files [col. 2, lines 28-31].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

Art Unit: 2184

- configuration files and recovery tool files including
*.INI, *.DRV, *.SYS, *.COM, *.EXE, etc... [col. 12, lines 41-67].

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703)305-9713. The fax phone number for this Group is (703)746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2184


or faxed to:

(703) 746-7239, (for formal communications
intended for entry)

Or:

(703) 746-7240 (for informal or draft
communications, please label "PROPOSED" or
"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).


DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2184

DML
February 21, 2002